



Clinical Characteristics of Examined Patients of Children with Neodontogenic Facial Abscesses and Phlegmons

1. **Azimov Aziz Mukhammadzhonovich**
2. **Pulatov Ashraf Ilhamovich**

Received 20th Aug 2023,
Accepted 21st Sep 2023,
Online 20th Oct 2023

¹ DSc, Associate Professor,
Tashkent State Dental Institute
² Tashkent State Dental Institute
Tashkent, Republic of Uzbekistan

Abstract: Acute neodontogenic purulent diseases of the maxillofacial region occupy a leading place in maxillofacial surgery. Before the introduction of antibiotics the frequency of these diseases was extremely high in the subsequent period a decrease began, but in recent years a tendency to increase (59-60%) has been noticed. The main reason for this is the growth of mono- and polyresistant microbes, neodontogenic changes in virulent factors, etc. Also significant changes on the part of macroorganisms, which is mainly expressed in changes in the immune system, under the influence of various environmental and social factors, has become one of the reasons for the increase in inflammatory diseases of this kind. Thus, according to M. Azimov (2021), the number of patients with neodontogenic inflammatory diseases of the maxillofacial region treated in the department of paediatric maxillofacial surgery of TMSI has doubled in the last 10 years.

Key words: diagnostics , complex treatment, neodontogenic abscesses, phlegmon children

Introduction: We all know well that the causative agent of neodontogenic inflammatory processes, including neodontogenic phlegmons, are microorganisms that are considered the main representatives of the permanent microflora of the oral cavity, such as staphylococci, streptococci, enterococci, diplococci, gram-positive and gram-negative bacilli, fungi, mycoplasmas, protozoa, spirochetes. Thus, the infectious-inflammatory process is a manifestation of the interaction of pathogenic flora with the macroorganism in the form of its ability to respond to the impact of this microflora. It is known that most clinicians of health care workers show great interest in determining the sensitivity of microbes to drugs, i.e. antibioticograms. Apparently, this is not accidental, as a qualified clinician is fully aware that antibioticogram allows the doctor to prescribe the most effective drugs.

Proceeding from this, we set ourselves the goal of studying microflora and its properties in children

with neodontogenic phlegmons of maxillofacial region.

Purpose of the study: clinical characteristics of the examined patients of children with neodontogenic abscesses and phlegmons of the face.

Materials and methods of the study are based on the observation and treatment of 64 patients with abscesses and phlegmons of maxillofacial region, aged from 1 to 14 years, who were in the clinic of paediatric surgical dentistry of the first Tashkent State Medical University in the period from 2021 to 2023. All patients were hospitalised for emergency indications, 27 of them with abscesses, 37 with phlegmons. Of the patients examined, 35(55.6%) were boys and 28(44.4%) were girls. The distribution of patients by sex, age and forms of inflammatory process is presented in Table 1

Table 1.

Sex and age characteristics of patients with abscesses and phlegmons of the Chelyabinsk region

sex	Age (years)	Abscess		Phlegmon		Total:	
		Abs	%	Abs	%	Abs	%
Boys	1-8	4	7	7-	9	11	9
	8-14	10	15	14	19	24	17
Girls	1-8	6	11	5	7	10	8
	8-14	7	12	11	15	18	27,7
Total:		27	100	37	100	64	100

According to the data of this table, abscesses and phlegmons of the NLL were most often observed in girls and boys aged from 8 to 14 years.

On admission, patients complained of pain in the area of swelling, weakness, malaise, sleep and appetite disorders, and increased body temperature. The temperature reaction of the organism to the inflammatory process ranged from 37.2° to 38.0°C, in 12 patients there was an increase in the range of 38.1-39°C and in 3 above 39°C. No cardiovascular disorders were noted in the patients, and tachycardia was associated with the existing hyperthermia, moderate pulse rate was observed. Respiratory insufficiency and BP elevation were not noted and accordingly were age-related variations.

RESULTS: The study of the localisation of the inflammatory process revealed that in the majority of patients the focus of the inflammatory process occupied one space in 83 patients (65.9%), most often the submandibular region. Two anatomical areas were occupied in 23,8% (30 patients) and only in 13 patients (10,3%) - 3 and more spaces. Neutrophil leucocytosis was noted in the indices of the general blood analysis in all examined patients. Out of 126 patients in 22 (17,5%) the number of leucocytes was up to $10 \times 10^9/l$, in 65 (51,6%) - from $10 \times 10^9/l$ to $15 \times 10^9/l$, in 35 (27,8%) - within $15 \times 10^9/l$ - $20 \times 10^9/l$.

General urinalysis values and urine sediment microscopy were within normal limits.

Conclusions: Thus, the clinical and laboratory parameters of the patients at - admission corresponded to the average degree of severity, and they represented conditionally homogeneous groups for the study.

Literature:

1. Azimov M. I., Shomurodov K.E. A technique for Cleft Palate Repair. *Journal of research in health science*. Vol. 1, No. 2, 2018, pp. 56-59.
2. Ширынбек И., Б. Пулатова, А. Шукпаров, и К. Шомуродов. К вопросу об изучении факторов стабильности костного аугментата. *Медицина и инновации*, т. 1, вып. 3, январь 2022 г., сс. 151-6, doi:10.34920/min.2021-3.021.
3. Эйзенбраун О.В. Применение туннельной техники костной пластики у пациентов с атрофией костной ткани челюстей: дисс. ... канд.мед.наук. – Москва, 2018. – 257 с.: ил.
4. Byun S-H, Kim S-Y, Lee H, et al. Soft tissue expander for vertically atrophied alveolar ridges: Prospective, multicenter, randomized controlled trial. *Clin Oral Impl Res*. 2020;31:585–594. <https://doi.org/10.1111/clr.13595>
5. Fu J.H., Su C.Y., Wang H.L. Esthetic soft tissue management for teeth and implants. *The journal of evidence-based dental practice*. 2012;12(3 Suppl):129-142. doi:10.1016/S1532-3382(12)70025-8.
6. Khasanov I. I., Rizaev J. A., Abduvakilov J. U., Shomurodov K. E., Pulatova B. Z. Results of the study of indicators of phosphorus-calcium metabolism in patients with partial secondary adentia // *Annals of the Romanian Society for Cell Biology*. – 2021. – C. 251-258.
7. Khoury F., Antoun H., Missika P., Bessade J. Bone augmentation in oral implantology. *Quintessence*; 2007.
8. Park, S. H., Choi, S. K., Jang, J. H., Kim, J. W., Kim, J. Y., Kim, M. R., & Kim, S. J. (2013). Self-inflating oral tissue expander for ridge augmentation in the severely atrophic mandible. *Journal of the Korean Association of Oral and Maxillofacial Surgeons*, 39, 31–34.
9. Shukparov Asylbek Bayadilovich, Shomurodov Kakhramon Erkinovich, & MirkhusanovaRano Sergey kizi (2022). THE ROLE OF PRELIMINARY EXPANSION OF SOFT TISSUES BEFORE GBR. *World Bulletin of Public Health*, 13, 206-209.
10. Urban IA, Monje A. Guided Bone Regeneration in Alveolar Bone Reconstruction. *Oral Maxillofac Surg Clin North Am*. 2019;31(2):331-338. doi:10.1016/j.coms.2019.01.003.
11. Zhao X, Zou L, Chen Y, Tang Z. Staged horizontal bone augmentation for dental implants in aesthetic zones: A prospective randomized controlled clinical trial comparing a half-columnar bone block harvested from the ramus versus a rectangular bone block from the symphysis. *Int J Oral Maxillofac Surg*. 2020;49(10):1326-1334. doi:10.1016/j.ijom.2019.12.010